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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,091

02/05/2004

Asdrubal Garcia-Ortiz

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03/05/2009

SONNENSCHN NATH & ROSENTHAL LLP

P.O. BOX 061080

WACKER DRIVE STATION, SEARS TOWER

CHICAGO, IL 60606-1080

EXAMINER

DWIVEDI, VIKANSHA S

ART UNIT

PAPER NUMBER

3741

MAIL DATE

DELIVERY MODE

03/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/773,091

Applicant(s)

GARCIA-ORTIZ, ASDRUBAL

Examiner

VIKANSHA S. DWIVEDI

Art Unit

3741

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/9/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CD/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/9/2009 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as obvious over Rao et al.

Rao discloses a pressure controller for use with a pump (44) (col. 3 ll. 65 - col. 4 ll. 10) through which a fluid can pass (fluid contained in the pump 44) and which can be driven at a selected speed by a pump drive mechanism (col. 4 ll. 11-42), said pressure controller comprising: a microprocessor (microcomputer, a computer with a microprocessor so a microprocessor is an inherent part of 28) having a control logic program (It is inherent part of 28 as control logic program is the part of the software architecture that controls what the program does) configured to receive at least two electrical signals correlated to at least two pressure valves (Col. 2 ll. 60-68 – Col. 3 ll. 1-

2 (signal or signals)), said electrical signals being generated by at least one pressure transducer (14) configured to transduce the pressure values of the fluid entering and exiting said pump (transducer 14 responds to the pressure in the chamber 10, in response to the control from the volume adjustment controller means 8, the volume adjustment means 6 adjusts the effective volume of the chamber 10. The volume adjustment means 6 also adjusts the quantity of a pressurizing fluid disposed in the effective volume of the chamber 10.); wherein, said microprocessor (inherent from 28) produces an output electrical signal used by said pump drive mechanism to drive said pump at said selected speed based on said control logic program (Col. 4 ll. 5-42) and at least one of the said electrical signals (Rao, teaches the pressure detector means 4 specifically includes a suitable transducer 14 which responds to the pressure in the chamber 10 and generates an electrical signal in proportion to the detected pressure. The signal or signals from the transducer 14 and the signal or signals from the switch means 12 are used by the volume adjustment controller means 8 to control the volume adjustment means 6).

Rao does not teach that the transducer 14 also transduces the pressure value of the fluid entering the pump as required by claim 14; Rao discloses the claimed invention except for two transducers, transducing values at the inlet and the outlet of the pump. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide two pressure transducers, one at the inlet and another at the outlet in order to provide an accurate control, since such a modification

would amount to a mere duplication of parts. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

Response to Arguments

Applicant's arguments filed 1/9/2009 have been fully considered but they are not persuasive. The volume adjustment controller means 8 receives electrical signals which are generated by the pressure detector means 4. In the embodiment illustrated in FIG. 2, the pressure detector means 4 specifically includes a suitable transducer 14 which responds to the pressure in the chamber 10 and generates an electrical signal in proportion to the detected pressure. The signal or signals from the transducer 14 and the signal or signals from the switch means 12 are used by the volume adjustment controller means 8 to control the volume adjustment means 6. In response to the control from the volume adjustment controller means 8, the volume adjustment means 6 adjusts the effective volume of the chamber 10. The volume adjustment means 6 also adjusts the quantity of a pressurizing fluid disposed in the effective volume of the chamber 10. The transducer 14 that is disposed on the fluid output or exit of the chamber 10 in Rao is transducing the pressure value of the fluid exiting the pump.

Allowable Subject Matter

Claims 15 and 16 allowed.

The following is an examiner's statement of reasons for allowance: Prior art does not teach in combination with the other limitation of the independent claim a microprocessor

using at least one of a first drive mechanism speed effective to control the pressure entering the pump, and a second drive mechanism speed effective to control the pressure exiting the pump to determine a pump drive mechanism speed that would theoretically maintain at least one of said pressure entering said pump and said pressure exiting said pump at about the value at which said pressures entering and exiting said pump were measured via said electrical signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIKANSHA S. DWIVEDI whose telephone number is (571)272-7834. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL CUFF can be reached on 571-272-6778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vikansha S Dwivedi/
Examiner, Art Unit 3741

/Michael Cuff/
Supervisory Patent Examiner, Art Unit 3741